

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,287	12/29/2000	Jeffery R. Eck	088305-0116	6508
7590 01/22/2007 William T. Ellis FOLEY & LARDNER			EXAMINER	
			SINGH, RACHNA	
Washington Harbour 3000 K Street, N.W., Suite 500			· ART UNIT	PAPER NUMBER
Washington, Do		•	2176	
			·	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Summers	09/750,287	ECK, JEFFERY R.				
Office Action Summary	Examiner	Art Unit				
	Rachna Singh	2176				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 07 No.	ovember 2006.					
_	action is non-final.					
	ce this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-25</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-25</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal Pa					
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 09/750,287 Page 2

Art Unit: 2176

#### **DETAILED ACTION**

 This action is responsive to communications: Amendments and Remarks filed on 11/07/06.

2. Claims 1-25 are pending. Claims 1, 24, and 25 are independent claims.

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite "the target model and the source model are created <u>based in part on a second user command to initiate</u> creation of such models automatically." Applicant is requested to identify portions of the Specification where this feature is taught. Examiner is unable to find support for this feature. Although page 9 of the Specification discusses allowing the user to select

whether to automatically create or allow the user to create business rules, there is no indication of multiple commands. Clarification and/or correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4-6, 10-11, 13-15, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Fong et al., US 6,678,867 B2, 1/13/04 (continuation of application filed on 12/23/97).

In reference to claims 1, 24, and 25, Fong teaches a method for providing a graphical user interface for creating and editing a mapping of a first structural description to a second structural description. Fong's system comprises the following:

-Inputting a structural description of a first system that communicates over a protocol having a first structured format, wherein the first structured format can be in XML.

Inputting a structural description of a second system that communicates over a protocol

having a second structured format, wherein the second structured format can be in XML. See abstract and columns 31-32. Compare to "receiving an XML environment".

-Accepting interactive user input, to be processed by a map creator, for making plural changes to any of the component mapping values. The transformation rules are processed by a map creator to create the transformation map. The user selects an input source file for transformation to a target output file using a map specified by the user. See column 3, lines 54-67 and column 4, lines 1-10. The transformation can be from SGML to HTML or another structured format such as a database information format. See column 3, lines 20-31. The system accepts user input for selecting an input source file for transformation to a target output file using an already existing map. The user input is then processed, and the requested input file and map are then processed to transform the input file into the requested output file format. Compare to "creating a target model and a source model in accordance with predetermined rules, with one of said models being an XML model and the other of said models being a flat file or data base model;".

-The selection of business rules by the user is selecting whether to automatically create or allow the user to create business rules. In other words, the mere selection by the user of business rules indicates that the creation is initiated by the user. Fong teaches that accepting interactive user input for making plural changes to any of the component *mapping values*. The transformation rules are processed by a map creator to create the transformation map. Although the user is creating a *transformation map*; the user

is not necessarily "creating a target model or source model" because all the user does is initiate the transformation by selecting an input source file for transformation to a target output file which meets the limitation selecting, by a user by way of a first user command, whether or not to automatically create or allow the user to create business rules for moving data from a source file to a target filed for a plurality of defining items in the source model". See column 3, lines 54-67 and column 4, lines 1-10.

- -Processing the transformation using a map created by the user. See column 4, lines 1-
- Compare to "creating a run file with file names for generating said map".
- -Accepting user input for selecting an input source file for transformation to a target output file using an already existing map. The user input is then processed, and the requested input file and map are then processed to transform the input file into the requested output file format. See column 3, lines 20-31 & 54-67 and column 4, lines 1-
- 10. Compare to "wherein the target model and source model are created based in part on a second user command to initiate creation of such models automatically"

In reference to claim 4, Fong teaches an attribute list for HTML and SGML (can also be XML) tags. See figures 8A-1 through 8B.

In reference to claim 5, Fong teaches accepting interactive user input, to be processed by a map creator, for making plural changes to any of the component

mapping values. The transformation rules are processed by a map creator to create the transformation map. The user selects an input source file for transformation to a target output file using a map specified by the user. See column 3, lines 54-67 and column 4, lines 1-10. The transformation can be from SGML to HTML or another structured format such as a database information format. See column 3, lines 20-31.

In reference to claim 10, Fong teaches that the processing the transformation using the map includes source and target models and files and the access files. See columns 3-4.

In reference to claim 11, Fong teaches inputting a structural description of a first system that communicates over a protocol having a first structured format, wherein the first structured format can be in XML. Inputting a structural description of a second system that communicates over a protocol having a second structured format, wherein the second structured format can be in XML. See abstract and columns 31-32.

In reference to claim 13, Fong teaches accepting interactive user input, to be processed by a map creator, for making plural changes to any of the component mapping values. The transformation rules are processed by a map creator to create the transformation map. The user selects an input source file for transformation to a target output file using a map specified by the user. See column 3, lines 54-67 and column 4,

Application/Control Number: 09/750,287

Art Unit: 2176

lines 1-10. The transformation can be from SGML to HTML or another structured

format such as a database information format. See column 3, lines 20-31.

In reference to claim 14, Fong teaches inputting a structural description of a first

Page 7

system that communicates over a protocol having a first structured format, wherein the

first structured format can be in XML. Inputting a structural description of a second

system that communicates over a protocol having a second structured format, wherein

the second structured format can be in XML. See abstract and columns 31-32.

In reference to claim 15, see figure 12C in which Fong teaches defining the item

names in the source and target model.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Fong et al.</u>, US 6,678,867 B2, 1/13/04 (continuation of application filed on 12/23/97).

In reference to claim 6, Fong teaches displaying the source and target model conversions. See figure 12B and 12C. Fong does not expressly state using a "rule builder icon"; however, Fong discloses the use of icons within a GUI wherein an icon is displayed on a screen and can be manipulated by the user. The icon generates a user-friendly interface upon selection of the icon. See column 2, lines 1-18. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use an icon for creating rules because it was well known and common at the time of the invention to provide a function through use of an icon. See column 2, lines 1-18 of Fong.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al., US 6,678,867 B2, 1/13/04 (continuation of application filed on 12/23/97) in view of Call, US 2002/0143521 A1, 10/03/02 (provisional filed 12/15/00).

In reference to claim 12, Fong teaches that the user can choose a source input and a target output and process the transformation. See abstract. Fong's database model results from the transformation of an SGML or HTML file that contains tags with children. See figures 3A to 3B. It is inherent that a tag without any children would only result in one record being created in the database model as there are no children. Fong

does not expressly state, "wherein the flat file or database model is a fixed length representation of a variable-length XML file". However, Call teaches variable length data is chosen for communications on the Internet. HTML and XML are variable-length representations for sharing data via the Internet. Call discloses a database system is organized into a collection of items each of which is represented by a sequence of fixed length integers. See pages 2-3, paragraphs [0010]-[0022]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Call's database with a fixed length representation of the variable-length XML file in the system of Fong because it was desirable to represent data in a more efficient compressed format which requires less storage space and needs less transmission bandwidth. See page 2, paragraphs [0015]-[0017].

10. Claims 2-3, 7-9, and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al., US 6,678,867 B2, 1/13/04 (continuation of application filed on 12/23/97) in view of Kutay et al., US 2002/0026461 A1, 2/28/02 (provisional filed 6/5/00).

In reference to claims 2 and 3, Fong does not teach creating test data; however, Kutay teaches testing to verify access to the data reference structure. See figure 9B and page 7. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a source model to a target model in accordance with rules. Furthermore, allowing a user

to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

In reference to claims 16-17, Fong does not teach the test data is an XML message or a flat file. Kutay teaches that the source model can be any of a flat file, an XML file, or any other format. See page 7, paragraphs [0104]-[0119]. It would have been obvious to one or ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a source model to a target model in accordance with rules. Furthermore, allowing a user to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

In reference to claim 18, Fong does not teach the test data is generated based on information in the source model. Kutay teaches that the test data is based on the source model which can be an XML file. See page 7, paragraphs [0104]-[0119]. It would have been obvious to one or ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a source model to a target model in accordance with rules. Furthermore, allowing a user to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

In reference to claim 19, Fong does not teach that the XML message includes a preamble or prolog; however it was well known in the art at the time of the invention for an XML message to contain information about the DTD, schema, or character set being used in the message thus one of ordinary skill in the art could have included such information in the message.

In reference to claim 20, Fong does not teach the XML message comprises a DTD or schema with all defining items in the DTD or schema. Kutay teaches that the test data is based on the source model which can be an XML file. See page 7. paragraphs [0104]-[0119]. The data reference structure and the connection to the data source are verified thus the attributes are checked according to the source document that could be an XML type. In one embodiment, the user interface module further includes a view editor to create one or more views within the presentation layer of the application and an action editor to define actions within the presentation layer. In one embodiment, an XML editor is provided within user interface module to create views presented in XML format and an XML transform editor is further provided to convert documents created in a source format from a source Document Type Definition (DTD), for example XML, to a target DTD, for example HTML, and to present the document to users in the target format defined by the target DTD. It would have been obvious to one or ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a source model to a target model in accordance

with rules and allowing a user to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

In reference to claim 21, Fong does not teach the test data is created to be consistent with properties of the defining items and using attributes from an attribute list for that defining item, if such an attribute list is included in the XML DTD or schema: however, Kutay teaches that the test data is based on the source model which can be an XML file. See page 7, paragraphs [0104]-[0119]. The data reference structure and the connection to the data source are verified thus the attributes are checked according to the source document that could be an XML type. It would have been obvious to one or ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a source model to a target model in accordance with rules and allowing a user to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

In reference to claims 22, Fong does not teach the test data is in the same sequence defined in the XML envorinment; however, Kutay teaches that the test data is based on the source model which can be an XML file. See page 7, paragraphs [0104]-[0119]. The data reference structure and the connection to the data source are verified thus the attributes are checked according to the source document that could be an XML type. It would have been obvious to one or ordinary skill in the art at the time of the invention to combine Fong and Kutay since both Fong and Kutay teach modifying a

source model to a target model in accordance with rules and allowing a user to test the "defining items" or data reference structures would provide better consistency for all of the attributes.

Regarding claim 23, Fong does not teach the generated test data for defining an item is a tag name; however, Kutay does. Kutay teaches the test data is based on a source model and assigning a tag name to the test data. See figure 12A.

In reference to claims 7-9, Fong does not teach a drag and drop mechanism in which an element can be moved; however, Kutay does. Kutay teaches dragging and dropping tags displayed in windows within an interface to map the input from the view to process data model structure. See figure 11E, 12, 16C, 16F and page 9. It would have been obvious to combine the drag and drop feature of Kutay in a system of Fong since both Fong and Kutay map source elements to target elements in order to produce an output. Providing a drag and drop functionality provides for an easy method for a user to carry out operations in a graphical user environment.

## Response to Arguments

11. Applicant's arguments and amendments filed 11/27/06 have been fully considered but they are not persuasive.

Application/Control Number: 09/750,287

Art Unit: 2176

Applicant has introduced new limitations in claims 1 and 24-25 reciting "selecting, by a user by way of a first user command, whether or not to automatically create or allow the user to create business rules . . . ". The selection of business rules by the user is selecting whether to automatically create or allow the user to create business rules. In other words, the mere selection by the user of business rules indicates that the creation is initiated by the user. Fong teaches that accepting interactive user input for making plural changes to any of the component mapping values. The transformation rules are processed by a map creator to create the transformation map. Although the user is creating a transformation map; the user is not necessarily "creating a target model or source model" because all the user does is initiate the transformation by selecting an input source file for transformation to a target output file which meets the limitation selecting, by a user by way of a first user command, whether or not to automatically create or allow the user to create business rules". See column 3, lines 54-67 and column 4, lines 1-10. The system accepts user input for selecting an input source file for transformation to a target output file using an already existing map. The user input is then processed, and the requested input file and map are then processed to transform the input file into the requested output file format. Thus the user is not actually creating the source or target model, rather he is initiating the creation of the models.

It is noted, the term automatically requires user input or a user command to initiate the task that is being performed automatically. Newly amended claims 6 and 12 have been addressed in the rejections above.

In view of the comments above, the rejection is maintained.

#### Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM).

Application/Control Number: 09/750,287 Page 16

Art Unit: 2176

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS 01/09/07

Heather R. Herndon
Supervisory Patent Examiner
Technology Center 2100